

Ross Skipe

3/26/2007

10/541307

=> file hcaplus
FILE 'HCAPLUS' ENTERED AT 16:24:04 ON 26 MAR 2007
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FILE COVERS 1907 - 26 Mar 2007 VOL 146 ISS 14
FILE LAST UPDATED: 25 Mar 2007 (20070325/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

Inventor Search

```
=> d que nos 152
L49      226 SEA FILE=HCAPLUS ABB=ON PLU=ON ACKERMANN J?/AU
L50      7 SEA FILE=HCAPLUS ABB=ON PLU=ON HILTNER H?/AU
L51      88 SEA FILE=HCAPLUS ABB=ON PLU=ON SIEGERT H?/AU
L52      2 SEA FILE=HCAPLUS ABB=ON PLU=ON L49 AND L50 AND L51
```

=> d ibib ed abs hitstr 152 1-2

L52 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:587918 HCAPLUS Full-text
DOCUMENT NUMBER: 141:124115
TITLE: Transesterification procedure for the continuous production of alkyl (meth)acrylates from methyl (meth)acrylates with repeated catalyst recycling
INVENTOR(S): Ackermann, Jochen; Hiltner, Horst; Siegert, Hermann
PATENT ASSIGNEE(S): Roehm GmbH & Co. KG, Germany
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10301007	A1	20040722	DE 2003-10301007	200301 13
CA 2512628	A1	20040729	CA 2003-2512628	200311 21
WO 2004063140	A1	20040729	WO 2003-EP13060	200311 21

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE,
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
 SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
 ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
 DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

AU 2003283419	A1	20040810	AU 2003-283419	
				200311 21
EP 1583733	A1	20051012	EP 2003-775379	
				200311 21
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017983	A	20051206	BR 2003-17983	
				200311 21
CN 1738790	A	20060222	CN 2003-80108705	
				200311 21
JP 2006513241	T	20060420	JP 2004-565944	
				200311 21
US 2006211880	A1	20060921	US 2006-541307	
				200604 10
PRIORITY APPLN. INFO.:			DE 2003-10301007	A
				200301 13
			WO 2003-EP13060	W
				200311 21

OTHER SOURCE(S): MARPAT 141:124115

ED Entered STN: 23 Jul 2004

AB An procedure for the continuous production of alkyl (meth)acrylates (e.g., iso-Bu methacrylate) by the continuous catalytic transesterification of Me (meth)acrylates with high-boiling alcs. (e.g., isobutanol) is described. A very high space-time velocity and product yield can be achieved. This process enables the reuse of homogeneous transesterification catalyst several times and thus reduces the excipient costs; process flow diagrams are presented.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 2 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:532627 HCPLUS Full-text

DOCUMENT NUMBER: 139:85788

TITLE: Transesterification method for the continuous production of alkyl (meth)acrylates from alcohols and methyl (meth)acrylates

INVENTOR(S): Ackermann, Jochen; Gropp, Udo;
 Hiltner, Horst; Lausch, Hans-Rolf;
 Lunt-Rieg, Ingrid; Siegert, Hermann;
 Carloff, Ruediger

PATENT ASSIGNEE(S): Roehm GmbH & Co. KG, Germany

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003055837	A1	20030710	WO 2002-EP13828	200212 06
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10200171	A1	20030710	DE 2002-10200171	200201 04
AU 2002364281	A1	20030715	AU 2002-364281	200212 06
EP 1465859	A1	20041013	EP 2002-799053	200212 06
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK	BR 2002015458	A	20041123	BR 2002-15458
BR 2002015458	A	20041123	BR 2002-15458	200212 06
JP 2006503795	T	20060202	JP 2003-556372	200212 06
US 2005119500	A1	20050602	US 2004-500288	200406 29
US 6977310	B2	20051220	DE 2002-10200171	A
PRIORITY APPLN. INFO.:				200201 04
			WO 2002-EP13828	W
				200212 06

OTHER SOURCE(S): MARPAT 139:85788

ED Entered STN: 11 Jul 2003

AB A method for the continuous production of alkyl (meth)acrylates (e.g., Bu methacrylate) by the transesterification of Me (meth)acrylate with an alc. (e.g., 1-butanol) having a higher b.p. than methanol is described using azeotropic distillation for removal of the byproduct methanol and thin-film evaporation for recovery of the alkyl (meth)acrylate. A process flow diagram is presented.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file reg
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAR 2007 HIGHEST RN 928121-90-8
DICTIONARY FILE UPDATES: 25 MAR 2007 HIGHEST RN 928121-90-8

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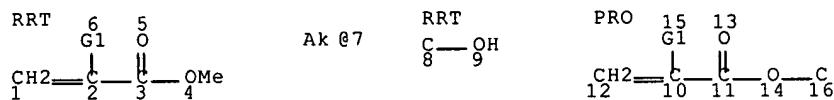
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d stat que 14
L2 STR



VAR G1=H/7
NODE ATTRIBUTES:
NSPEC IS RC AT 8
NSPEC IS RC AT 16
CONNECT IS E1 RC AT 7
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 7
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

*****MAPPINGS*****
NOD SYM ROL NOD SYM ROL
3 C RRT 11 C PRO
8 C RRT 16 C PRO
11 C PRO 3 C RRT
16 C PRO 8 C RRT
L4 98 SEA FILE=CASREACT SSS FUL L2 (391 REACTIONS)

100.0% DONE 120660 VERIFIED 391 HIT RXNS (173 INCOMP) 98 DOCS
SEARCH TIME: 00.00.25

=> file cas react
'CAS' IS AN AMBIGUOUS FILE OR CLUSTER NAME
CASLINK - Linked CAS files (Predefined Search Sequences)
CASRNS - CAS Registry Numbers Cluster
CA - The Chemical Abstracts File 1907-present
CASREACT - The Chemical Abstracts Reaction Search Service
ENTER FILE OR CLUSTER NAME (IGNORE):end

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=> file casreact
FILE 'CASREACT' ENTERED AT 16:25:51 ON 26 MAR 2007
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FILE CONTENT:1840 - 25 Mar 2007 VOL 146 ISS 13

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*
* CASREACT now has more than 12 million reactions *
*

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que nos 115
L2 STR
L4 98 SEA FILE=CASREACT SSS FUL L2 (391 REACTIONS)
L5 21 SEA FILE=CASREACT ABB=ON PLU=ON L4/INC
L6 77 SEA FILE=CASREACT ABB=ON PLU=ON L4 NOT L5
L7 276845 SEA FILE=REGISTRY ABB=ON PLU=ON TI/ELS
L8 4401 SEA FILE=CASREACT ABB=ON PLU=ON L7/CAT
L12 4 SEA FILE=CASREACT ABB=ON PLU=ON L4 (L) L8
L15 4 SEA FILE=CASREACT ABB=ON PLU=ON L12 AND L6

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FILE COVERS 1907 - 26 Mar 2007 VOL 146 ISS 14
FILE LAST UPDATED: 25 Mar 2007 (20070325/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

10/541307

Structure search

```
=> d que nos 148
L7      276845 SEA FILE=REGISTRY ABB=ON   PLU=ON   TI/ELS
L16      STR
L17      SCR 970
L20      SCR 2043
L22      48651 SEA FILE=REGISTRY SSS FUL L16 AND L17 NOT L20
L23      111119 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L22
L24      743109 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L7
L26      62899 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L24 (L) CAT/RL
L27      29304 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L23 (L) PREP/RL
L28      303 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L26 AND L27
L32      5 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L28 AND RECYCL?/OBI
L33      5 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L28 AND TRANSESTERIFIC?/
                  OBI (L) CONTINUOUS?/OBI
L35      1 SEA FILE=REGISTRY ABB=ON   PLU=ON   80-62-6/RN
L36      1 SEA FILE=REGISTRY ABB=ON   PLU=ON   96-33-3/RN
L37      2 SEA FILE=REGISTRY ABB=ON   PLU=ON   L35 OR L36
L38      36941 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L37
L39      18204 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L38 (L) RACT/RL
L40      54 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L39 AND L28
L41      3 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L40 AND RECYCL?/OBI
L42      2 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L40 AND TRANSESTERIFIC?/
                  OBI (L) CONTINUOUS?/OBI
L44      38 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L40 AND POLYMER?/SC, SX
L45      8 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L40 AND PLASTICS?/SC, SX
L47      48 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L32 OR L33 OR L41 OR
                  L42 OR L44 OR L45
L48      43 SEA FILE=HCAPLUS ABB=ON   PLU=ON   L47 AND (1840-2003)/PRY,
                  PY, AY
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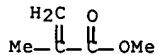
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=> file casreact hcaplus
FILE 'CASREACT' ENTERED AT 16:26:26 ON 26 MAR 2007
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```

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=> dup rem 115 148
PROCESSING COMPLETED FOR L15
PROCESSING COMPLETED FOR L48
L54      46 DUP REM L15 L48 (1 DUPLICATE REMOVED)
                  ANSWERS '1-4' FROM FILE CASREACT
                  ANSWERS '5-46' FROM FILE HCAPLUS
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=> d ibib abs ind fhit 1-4;d ibib ed abs ind hitstr 5-46
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```
L54 ANSWER 1 OF 46  CASREACT  COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 140:111418  CASREACT  Full-text
TITLE: Preparation of ketalized glycerol
                  (meth)acrylates and glyceryl (meth)acrylate
INVENTOR(S): Doi, Junichi; Masaki, Tomohiro
PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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=> d his nofile

(FILE 'HOME' ENTERED AT 12:12:34 ON 26 MAR 2007)

FILE 'CASREACT' ENTERED AT 12:12:54 ON 26 MAR 2007

L1 STRUCTURE
L2 STRUCTURE
L3 2 SEA SSS SAM L2 (2 REACTIONS)
L4 98 SEA SSS FUL L2 (391 REACTIONS)
SAV L4 CHO307/A
L5 21 SEA ABB=ON PLU=ON L4/INC
L6 77 SEA ABB=ON PLU=ON L4 NOT L5

FILE 'REGISTRY' ENTERED AT 12:40:39 ON 26 MAR 2007

L7 276845 SEA ABB=ON PLU=ON TI/ELS

FILE 'CASREACT' ENTERED AT 12:41:08 ON 26 MAR 2007

L8 4401 SEA ABB=ON PLU=ON L7/CAT
L12 4 SEA ABB=ON PLU=ON L4 (L) L8
L15 4 SEA ABB=ON PLU=ON L12 AND L6

FILE 'REGISTRY' ENTERED AT 13:47:03 ON 26 MAR 2007

L16 STRUCTURE
L17 SCR 970
L18 50 SEA SSS SAM L16 AND L17
L20 SCR 2043
L21 50 SEA SSS SAM L16 AND L17 NOT L20
L22 48651 SEA SSS FUL L16 AND L17 NOT L20
SAV L22 CHO307A/A

FILE 'HCAPLUS' ENTERED AT 14:47:53 ON 26 MAR 2007

L23 111119 SEA ABB=ON PLU=ON L22
L24 743109 SEA ABB=ON PLU=ON L7
L25 4204 SEA ABB=ON PLU=ON L23 AND L24
L26 62899 SEA ABB=ON PLU=ON L24 (L) CAT/RL
L27 29304 SEA ABB=ON PLU=ON L23 (L) PREP/RL
L28 303 SEA ABB=ON PLU=ON L26 AND L27
L29 158 SEA ABB=ON PLU=ON L28 AND POLYMER?/SC, SX
L32 5 SEA ABB=ON PLU=ON L28 AND RECYCL?/OBI
L33 5 SEA ABB=ON PLU=ON L28 AND TRANSESTERIFIC?/OBI (L)
CONTINUOUS?/OBI

FILE 'REGISTRY' ENTERED AT 15:15:18 ON 26 MAR 2007

L35 1 SEA ABB=ON PLU=ON 80-62-6/RN
L36 1 SEA ABB=ON PLU=ON 96-33-3/RN
L37 2 SEA ABB=ON PLU=ON L35 OR L36

FILE 'HCAPLUS' ENTERED AT 15:18:56 ON 26 MAR 2007

L38 36941 SEA ABB=ON PLU=ON L37
L39 18204 SEA ABB=ON PLU=ON L38 (L) RACT/RL
L40 54 SEA ABB=ON PLU=ON L39 AND L28
L41 3 SEA ABB=ON PLU=ON L40 AND RECYCL?/OBI
L42 2 SEA ABB=ON PLU=ON L40 AND TRANSESTERIFIC?/OBI (L)
CONTINUOUS?/OBI
L43 9 SEA ABB=ON PLU=ON L32 OR L33 OR L41 OR L42
L44 38 SEA ABB=ON PLU=ON L40 AND POLYMER?/SC, SX
L45 8 SEA ABB=ON PLU=ON L40 AND PLASTICS?/SC, SX
L46 43 SEA ABB=ON PLU=ON L44 OR L45

10/541307

L47 48 SEA ABB=ON PLU=ON L32 OR L33 OR L41 OR L42 OR L44 OR
L48 43 SEA ABB=ON PLU=ON L47 AND (1840-2003)/PRY, PY, AY
L49 226 SEA ABB=ON PLU=ON ACKERMANN J?/AU
L50 7 SEA ABB=ON PLU=ON HILTNER H?/AU
L51 88 SEA ABB=ON PLU=ON SIEGERT H?/AU
L52 2 SEA ABB=ON PLU=ON L49 AND L50 AND L51
L53 42 SEA ABB=ON PLU=ON L48 NOT L52

FILE 'HCAPLUS' ENTERED AT 16:24:04 ON 26 MAR 2007
D QUE NOS L52
D IBIB ED ABS HITSTR L52 1-2

FILE 'REGISTRY' ENTERED AT 16:25:28 ON 26 MAR 2007
D STAT QUE L4

FILE 'CASREACT' ENTERED AT 16:25:51 ON 26 MAR 2007
D QUE NOS L15

FILE 'HCAPLUS' ENTERED AT 16:26:10 ON 26 MAR 2007
D QUE NOS L48

FILE 'CASREACT, HCAPLUS' ENTERED AT 16:26:26 ON 26 MAR 2007
L54 46 DUP REM L15 L48 (1 DUPLICATE REMOVED)
ANSWERS '1-4' FROM FILE CASREACT
ANSWERS '5-46' FROM FILE HCAPLUS
D IBIB ABS IND FHIT 1-4
D IBIB ED ABS IND HITSTR 5-46

=>